National Transportation Safety Board **FACTUAL REPORT** **AVIATION**	NTSB ID: ERA11FA214	Aircraft Registration Number: N808TD
	Occurrence Date: 03/26/2011	Most Critical Injury: Fatal
	Occurrence Type: Accident	Investigated By: NTSB

Location/Time

Nearest City/Place	State	Zip Code	Local Time	Time Zone	
Palm Coast	FL	32164	1629	EDT	

Airport Proximity: On Airport/Airstrip	Distance From Landing Facility:

Aircraft Information Summary

Aircraft Manufacturer	Model/Series	Type of Aircraft
AEROSTAR S A	YAK-52	Airplane

Revenue Sightseeing Flight: No

Air Medical Transport Flight: No

Narrative

Brief narrative statement of facts, conditions and circumstances pertinent to the accident/incident:

*** Note: NTSB investigators either traveled in support of this investigation or conducted a significant amount of investigative work without any travel, and used data obtained from various sources to prepare this aircraft accident report. ***

HISTORY OF FLIGHT

On March 26, 2011, about 1629 eastern daylight time, an Aerostar S.A. Yak-52, N808TD, registered to and operated by a private individual doing business as Walker Brothers Aircraft, collided with terrain during an aerobatic flight at Flagler County Airport (XFL), Palm Coast, Florida. The personal flight was operated under the provisions of 14 Code of Federal Regulations Part 91, and no flight plan filed. Visual meteorological conditions prevailed. The commercial pilot was fatally injured and the airplane sustained substantial damage due to impact forces and a postcrash fire. The flight departed from XFL about 7 minutes earlier.

The purpose of the flight was performance of aerobatic and non-aerobatic maneuvers by 4 airplanes of Red Thunder Air Show Team for a fly-in at the XFL Airport called “Wings Over Flagler.” Prior to the accident flight the team had flown 2 routines earlier that day; both earlier routines were flown as briefed and were uneventful. The first routine was performed at about 1115, and the second routine was performed about 1400. After the second routine all team members ate at the VIP tent where plenty of water was available.

During the third routine that day, the pilot of the accident airplane and one other pilot of the team were scheduled to perform aerobatic maneuvers while the pilots of the other two airplanes were scheduled to perform non-aerobatic maneuvers during the planned 10 to 15 minute routine. The aerobatic maneuvers scheduled to be performed by the accident pilot in part were a loop, wingover and barrel roll, heart maneuver, then a loop. The accident occurred during the heart maneuver.

The accident pilot was considered the lead pilot for the accident flight. According to a transcription of communications, at 1614:15, the pilot of the accident airplane contacted ground control and advised the controller that the flight of four was ready to taxi to the active runway and planned to fly in the aerobatic box for 15 minutes. The ground controller cleared the flight of four aircraft to taxi to runway 24, and at 1620:45, the accident pilot contacted the local controller and advised that the flight or four aircraft were ready to depart. The controller advised the flight of four aircraft to hold for an arrival then at 1621:48, cleared the flight of four aircraft into position and hold. At 1622:13, the local controller cleared the flight of four aircraft to depart and about 18 seconds later the accident pilot was heard to comment on the frequency, “ah red thunder go company go now.” At 1625:14, the local controller advised the accident pilot that the aerobatic box was cleared for them, which the pilot acknowledged. There were no further recorded transmissions from the accident pilot or any of the pilots of the team airplanes. Additionally, the pilot did not report any failure or malfunction on the frequency the

Narrative (Continued)

team was utilizing which was also being monitored by the control tower.

The pilot who was performing aerobatics with the accident pilot and who was flying in the right wing position reported he, the accident pilot (lead pilot), and the pilot's of two other airplanes were performing an aerial routine that was pre-briefed. He and the accident pilot were the only two pilots performing aerobatic maneuvers, and he reported that at the completion of one maneuver (heart) while crossing at the bottom of the maneuver, the accident pilot was to pull up to perform a loop, while he was to pull up and do a Half Cuban Eight maneuver. While at the top of the Half Cuban Eight maneuver, he had visual with the accident pilot and at that time all appeared normal. As he completed the half roll he saw the accident flight in a position that was not expected. He broadcast the first name of the accident pilot on the air-to-air frequency they were using but there was no response. He then broadcast on the frequency to "knock it off" and expected all to stop maneuvers and to re-group; again there was no response from the accident pilot. He then heard on the frequency "no, no, no" which was later attributed to another team pilot, and he returned for landing. While on base to final he noted smoke from the crash site, and he landed uneventfully.

The pilot of another airplane who was flying at the same time as part of the aerial routine reported that after completion of the heart maneuver, the accident pilot and the right wing position pilot flew vertical with the accident pilot to perform a loop and the right wing position pilot to perform a Half Cuban Eight. The pilot further reported that he next saw the accident pilot's airplane was upright in an approximately 45 degree down line angle flying down runway 24. The accident airplane continued on the same line of flight until impact. He initially reported he did not detect any deviation during the last 300 feet of the descent.

Witnesses on the ground reported seeing the airplane continue descending until ground contact. One witness did not perceive any change in pitch attitude from the top of the maneuver until losing sight just before impact. One individual videotaped the remaining seconds of the flight from the airport ramp, and later provided the video to NTSB.

According to local controller, after takeoff he observed the accident airplane and the other airplane scheduled to perform aerobatic maneuvers pass the air traffic control tower coming out of a heart shaped maneuver. Shortly afterwards he reported hearing "no no no" on the frequency used by the team. The controller reported looking out the southwest window and saw a flash fire approximately ½ mile southwest of the tower and 500 feet to the right side of runway 06. The controller immediately notified a fireflight helicopter which was located outside class D airspace that they needed assistance and to proceed inbound. Following the accident one team airplane was landed on runway 24, while the remaining team airplanes were landed on runway 06.

The airplane crashed during daylight conditions; there were no ground injuries.

PERSONNEL INFORMATION

The pilot, age 58, held commercial and private pilot certificates. At the commercial level he had ratings for airplane single engine land, and instrument airplane, and at the private level, he had a rating for airplane multi-engine. He was last issued a second class medical certificate with no medical restrictions on October 15, 2010. He listed a total time of 3,500 hours on the application for his last medical certificate. His last flight review in accordance with 14 CFR Part 61.56 was performed in a Piper PA-34-200T airplane on December 3, 2010.

NTSB review of the pilot's certified medical file from the Federal Aviation Administration (FAA) Aerospace Medical Certification Division revealed his first medical was dated July 16, 1981, and his last medical was dated October 15, 2010. He did not report any history of heart or vascular trouble or neurological disorders, epilepsy, seizures, stroke, or paralysis on any of the 23 medical application forms. Additionally, on the application form for his last medical certificate he indicated "No" to the question asking if the airman currently uses any medication.

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Performers of the Red Thunder Air Show team who were with the accident pilot several days before the accident stated he was in good spirits, but 3 days before the accident, the accident pilot advised he was a little tired after he and one other team pilot had performed some aerobatic maneuvers. Although a second flight was discussed between the accident pilot and the other team pilot, because the accident pilot claimed he was tired no further flights were flown that day. Two days before the accident after 2 practice performances by the team, the pilot made a remark that he would have to start working out more so the G forces would not get to him. That remark caught the attention of an individual of the Red Star Pilot's Association who had a discussion with the accident pilot about G and how to counter the effect on his body. Another team member jokingly commented to the accident pilot and the individual who discussed the G effects that the accident pilot would be in the weight room the next morning to start on an exercise program. A third flight was flown by the accident pilot and there were no further complaints by him pertaining to G or being tired up to and including the accident flight.

The pilot's wife and son were interviewed in person by a FAA inspector 3 days after the accident. They commented when interviewed that the pilot's comment about being tired was a reason to avoid further practice, and not related to his health. The pilot's wife reported that her husband was feeling fine but the weekend before he took a Rolaids for acid indigestion which he attributed to Mexican food consumed the night before. She also reported that his sleep habits were normal and there was no outstanding pressure on him.

The team members stated that the night before the accident date they ate at a local restaurant at 2030, had ice-cream and several of the team members reported going to bed about 2130. On the morning of the accident one team member reported eating breakfast with the accident pilot between 0715 and 0830; they then departed for the airport.

According to documents provided by personnel from the International Council of Air Shows (ICAS), an application for Statement of Aerobatic Competency (SAC) for the pilot was submitted to the FAA Flight Standards District Office, Nashville, TN, on January 9, 2010. The application and draft SAC card submitted to the FAA specified the authorized aircraft were all variants of the Yak 52, with an altitude limitation of 250 feet. The maneuvering limitation specified solo aerobatics, formation aerobatics, and night shows.

According to personnel from the FAA Flight Standards District Office, Nashville, TN, they did not retain a copy of the issued SAC card; however, their records indicate issuance of a SAC card on March 12, 2010.

The manager of the Flagler County Airport reported that all aerobatic performers participating in the 2011 Wings Over Flagler fly-in were required to present their SAC card prior to signing the waiver; however, copies were not made of the performer's SAC card.

Pilot logbooks and miscellaneous documents were provided by the pilot's family for review by NTSB. The provided pilot logbooks document his first logged flight which occurred on July 2, 1981, and his last logged flight in June 2002. His total time at the conclusion of his last logged flight was calculated to be approximately 1,830 hours. Further review of his first pilot logbook revealed his first entry specifying aerobatic flight training was dated September 1993. Additional entries specifying aerobatic training or flying continued to the end of his first pilot logbook. Further review of his second pilot logbook revealed that between August 1999, and September 2000, he listed flying 14.0 hours in a Skybolt performing various local aerobatics. The second logbook also reflected 15.0 hours local aerobatic training in a Yak 50 between September 1999, through September 2001.

Review of the provided documents lists the dates of his last flight review and instrument competency check which occurred on December 3, 2010. Further review of the miscellaneous documents

Narrative (Continued)

revealed that as of February 2, 2005, his total time was reported to be 2,894 hours, of which 300 hours were in the accident make and model airplane. The documents also indicate that between January 1, 2007, and March 1, 2008, he flew approximately 232 hours in the accident airplane as well as 2 others airplanes.

AIRCRAFT INFORMATION

The tandem two-seat, low wing, tailwheel airplane with retractable main landing gear was manufactured in 1983, designated serial number 833808. It was powered by a 360 horsepower Vendenyen 9 cylinder M-14P radial engine and equipped with a two bladed constant speed propeller. The front and aft seats were equipped with control sticks that are inconnected by push/pull tubes. The elevator primary flight control surface is operated by either control stick, then via a push/pull tube to a bellcrank near the aft seat, followed by cables which connect to the bellcrank near the aft seat and also to a bellcrank near the control surface. A trim tab attached to the left elevator is controlled via cable from the cockpit, while the flaps are pneumatically controlled by a single flap actuator then via control rods to the flap control surfaces. With the flaps retracted, the rod or piston extended from the left and right sides of the flap actuator measure approximately 1.25 inches and 6.5 inches, respectively, while with the flaps extended, the piston or rod extended from the left and right sides of the flap actuator measure approximately 6.5 inches and 1.25 inches, respectively. The rudder control surface is operated via cables from the cockpit to a bellcrank near the control surface, while the aileron flight control surfaces are controlled by push/pull tubes that connect to the rear control stick then via middle and outer bellcranks followed by another push/pull rod to the control surface. The airplane is rated for plus 7.0 and minus 5.0 G’s.

Review of the maintenance records revealed the last annual inspection was signed off as being completed on October 1, 2010, at a recorded hour meter reading of 578.2 hours, airframe total time of 1,188.2 hours, and engine time since overhaul of 578.6 hours. Heat damage to the airplane precluded determining the current hour meter reading.

METEOROLOGICAL INFORMATION

A special surface observation taken at Flagler County Airport at 1629, or at the time of the accident, indicates the wind was from 130 degrees at 9 knots, the visibility was 10 miles, and the skies were clear. The temperature and dew point were 28 and 10 degrees Celsius, respectively, and the altimeter setting was 29.88 inches of Mercury.

COMMUNICATIONS

At the time of the accident the pilots of the flight formation airplanes were communicating on 123.15 MHz. That frequency was being monitored by control tower personnel but that frequency was not being recorded by the control tower or any of the other airplanes in the formation.

AIRPORT INFORMATION

For the Fly-In an aerobatic box measuring 1,000 feet wide and 5,000 feet long was depicted near runway 06/24. The northern edge of the aerobatic box was just north of the north edge of runway 06/24, and the closest crowd line location to the closest portion of the aerobatic box measured 1,500 feet.

Personnel who planned to fly at the Fly-In signed a certificate of waiver, which included the accident pilot. The certificate of waiver allowed deviation from FAR’s 14 CFR Part 91.117(a) and (b), 91.119 (b) and (c), 91.127, 91.129, 91.155(a), 91.303(c) and (e), and 91.515. Additionally, 35 special provisions were stipulated. The stipulations indicate in part that pilots who perform aerobatics must possess a valid FAA Form 8710-7, titled Statement of Acrobatic Competency, and all limitations on the form will be adhered to including altitude restriction for the entire

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performance.

WRECKAGE AND IMPACT INFORMATION

The accident site was located on airport property which when plotted was located about the middle of the aerobatic box, which straight line distance to the nearest point of the crowd line box measured about 2,563 feet. All debris was located within the aerobatic box. The wreckage came to rest at 29 degrees 27.813 minutes North latitude and 081 degrees 12.331 minutes West longitude.

Further examination of the accident site revealed the initial impact was made by the right wing as evidence by the right wingtip which was found partially buried in the initial impact crater. The wingtip in the crater was oriented on a magnetic heading of 160 degrees magnetic. An arcing ground scar to the right was noted, followed by a crater located approximately 28 feet from the right wingtip impact point. Airplane debris consisting in part of the propeller blades was found along the energy path between the ground scar made by the right wing and the impact crater attributed to the engine. The wreckage consisting of the fuselage, wings, empennage, vertical and horizontal stabilizers was located 74 feet from the right wingtip location, or 46 feet from the dirt mound to the center of the resting position of the cockpit. The fuselage and sections of both wings were nearly consumed by the postcrash fire; the fuselage came to rest heading 078 degrees magnetic.

Examination of the wreckage revealed all components necessary to sustain flight remained attached to the airplane or were found in close proximity to the resting point of the main wreckage. Both main landing gears were found in the retracted position. All primary flight control surfaces remained attached. As first viewed the elevator flight control surface was found trailing edge up and the rudder flight control surface was trailing edge left. Examination of the elevator flight control system revealed control cable continuity from the bellcrank near the control surface to the bellcrank aft of the rear control stick. A push/pull tube from a bellcrank near the aft stick to the aft control stick was found fractured into 3 pieces. No foreign objects were noted on the ground between the elevator flight control surface and the cockpit; however, extensive heat damage was noted between those areas. Detailed examination of the elevator flight control system revealed no evidence of preimpact failure or malfunction.

Examination of the rudder flight control system revealed cable continuity from the bellcrank near the control surface to the forward bellcrank in the cockpit. Examination of the aileron flight control system revealed heat damage to several areas of the push/pull tubes; however no disconnects were noted at any attach point. Examination of the aft seat control stick revealed the aileron torque tube was fractured near the attach point; the aileron torque tube and aft seat control stick box were retained for further examination. While both wings were extensively damaged by the postcrash fire, the right flap was not destroyed and was noted to be extended, while the left flap was destroyed by the fire and it’s position could not be determined. The single flap actuator was located and the piston or rod extended from the left side of the actuator measured approximately 6.25 inches extended and the piston or rod extended from the right side of the actuator measured approximately 1.25 inches extension, respectively, consistent with flaps being extended.

Examination of the cockpit revealed the forward seat control stick was fractured near the stick attach point. A G meter was installed; one red needle was in the positive range at 4.3, while the other red needle was in the negative range at 6.8. The magneto switch was found in the both position. The pilot’s seatbelt and shoulder harness remained secured; however, the webbing was burned away. Inspection of the bulb filaments of the annunciator panel revealed no filaments exhibited extensive stretching, though the filaments for the “Shave in Oil” bulbs exhibited slight stretching of both bulb filaments with filament distortion noted.

Cursory examination of the engine revealed four of the nine cylinders were impact separated. The master rod appeared satisfactory when viewed from the crankcase openings of the separated cylinders. Both magnetos were separated as well as the carburetor. Both propeller blades were

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shattered near the propeller hub.

MEDICAL AND PATHOLOGICAL INFORMATION

A postmortem examination of the pilot was performed by the Florida District 23 Medical Examiner's Office, St. Augustine, Florida. The cause of death was listed as multiple blunt traumatic and thermal injuries. The autopsy report also indicated that the "pericardial sac and the heart are not available for examination."

Forensic toxicology were performed on specimens of the pilot by the FAA Bioaeronautical Sciences Research Laboratory (CAMI), Oklahoma City, Oklahoma, and also by Wuesthoff Reference Laboratory (Wuesthoff), Melbourne, Florida. The toxicology report by CAMI indicated testing for carbon monoxide and cyanide was not performed, while 40 mg/dL, mg/hg ethanol was detected in the submitted muscle specimen but no ethanol was detected in the submitted liver specimen. A note on the report indicates, "The ethanol found in this case is from sources other than ingestion", while the putrefaction block is marked, "No." The CAMI report also indicates that unquantified amounts of dextromethorphan were detected in the submitted liver and kidney specimens. The toxicology report from Wuesthoff indicates no drugs were detected in the submitted liver specimen of the tissue drug screen, and the results were also negative for the immunoassay screen, while 0.024 g/100g ethanol was detected during the volatile check of the submitted liver specimen.

According to the NTSB Chief Medical Officer Medical Factual Report, a review was made of the pilot's FAA blue ribbon medical file, the autopsy and toxicology reports, the investigator's report, and also a video that captured the descent immediately prior to impact. The factual report indicates that throughout the pilot's blue ribbon medical file, his only positive history was of an appendectomy at age 18. The factual report references the autopsy report which did not report any findings consistent with acute or chronic disease from the tissue that was available. With respect to the dextromethorphan detected in the liver and kidney specimens in the FAA CAMI toxicology report, the factual report indicates that medication is an over-the-counter (OTC) cough suppressant, and at usual doses and used alone, there are few side effects and there is no evidence that it impairs driving. The factual report references the National Highway Traffic Safety Administration for the comment related to lack of impairment when driving.

TEST AND RESEARCH

Airplane N270YK which was the other airplane being flown in aerobatic maneuvers at the time of the accident contained a Dynon D-10A electronic flight information system display. As part of the investigation the airplane owner allowed battery power to be applied and the Dynon was powered up. The display as first viewed depicted a maximum positive G's of 4.3, and a minimum G's of 0.4. The airplane was also equipped with a Garmin 396 global positioning system (GPS) receiver.

Postaccident the owner of N270YK, who was also performing aerobatic maneuvers with the accident pilot was asked to duplicate the aerobatic routine and record the G reading during the maneuvers. The sequence he flew was a loop, wingover, barrel roll, heart, and loop. He reported that during the first loop normally takes about 19 to 22 seconds to complete and the start of the maneuver is flown at 310 to 320 kilometer-per-hour (kph). As he flew it the G's would increase during the pull-up to between 3.5 and 4.3 positive, then the G would decrease to between .75 and 1.25 positive at the top of the loop. While descending on the back side of the loop the G's increased again to about 3.5 to 4.3 positive, then after leveling off would return to normal 1.0 G flight. The second maneuver consisting of a wingover to turn the formation around was begun from normal 1.0 G flight then a slow pull was increased which slowly increased the G's to between 2.0 and 2.5 positive. At the apex of the completion of the 180 degree turn the G loading was between .75 to 1.25. The third maneuver consisting of a barrel roll was begun with a steady pull increasing the G loading to between 2.75 and 3.0 G's, then at the top of the maneuver the G loading was between 1.0 and 1.5 G's. Following the completion of the barrel roll the next maneuver was the heart. The start of the

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heart maneuver began with a slow pull which steadily increased the G loading to between 3.7 and 4.3 positive, followed by .75 to 1.25 G loading at the top, followed by 3.5 to 4.3 G's during the recovery from the first loop. The pilot was then scheduled to do a 2nd loop, and both loops would have taken approximately 41 to 44 seconds to complete, and would have been the most positive G's for the longest period of time during the entire routine.

The Dynon D10-A and Garmin 396 GPS receiver were removed from N270YK, and shipped for readout to the NTSB Vehicle Recorders Division located in Washington, DC. The examination of the Dynon D10-A revealed it was not set to record; however, there were a few points of data in memory which could not be determined when or where they were recorded. The Dynon's are set at the factory to record data. The examination of the Garmin 396 portable GPS receiver revealed it was set to record, but no tracklogs were recorded. Although it would have been possible to recover deleted data from the Garmin through extraordinary measures by removing the internal memory chip and reading it out directly, that was not performed. Both components were returned to the owner.

A Garmin 496 portable GPS receiver from the accident airplane was also shipped to the NTSB's Vehicle Recorder's Division for readout. The GPS Factual Report indicated that although the unit was impact damaged, raw binary data was obtained from the FLASH memory device. Recorded track log data of the accident flight was identified and converted to engineering units using an in-house software program. The downloaded track log data included index, date, GPS time, latitude, longitude, GPS altitude, average groundspeed during the previous interval, and average track during this previous interval. The report also indicated that time-stamped GPS position location information indicates that the GPS receiver began recording erroneous information once aerobatic maneuvering began. That was evidenced by the anomalously high and low groundspeeds calculated at various points in the flight once maneuvering began. The track data associated with the accident flight indicates the airplane was accelerating during the takeoff roll at 1622:18, and continued to the last data point at 1628:36. At the last data point the airplane was located at 29 degrees 27.826 minutes North latitude and 081 degrees 12.322 minutes West longitude, at 71 feet GPS altitude, and the last calculated velocity and direction of travel were 153 miles-per-hour and 344 degrees true course. The resting point of the main wreckage was located approximately 212 degrees and 92 feet from the last recorded GPS location.

A video of the accident sequence was taken by a private individual who offered it for investigative purposes to NTSB personnel. The copy of the video was provided to the NTSB Vehicle Recorder's Division in an attempt to determine whether primary flight control surface movement or change in descent angle before ground contact could be determined. The report indicates that although the exact location where the video was shot from was not determined, nor was information concerning the lens, the examination of the video revealed the flight path angle was steeper during the time period between 4.7 and 2.3 seconds prior to the end of the recording, than it was during the last 1.3 seconds of the recording. Additionally, no parts were noted separating from the airplane. A copy of the report is included in the NTSB public docket for this case.

The "heart" maneuver being performed at the time of the accident begins with a pull up which can result in about 3 to 4 G's. The pilot of the other airplane performing the heart maneuver stated that postaccident he checked his on-board Dynon D10-A EFIS and it indicated the maximum G loading he experienced during the accident flight was 4.0 to 4.3 G's, and on the second to last aerobatic flight that day he encountered 5.0 G's.

Examination of the aft seat control stick fractured aileron torque tube and the aft seat control stick box was performed by the NTSB Materials Laboratory located in Washington, D.C. The result of the examination of the aileron torque revealed pronounced slant features with no evidence of preimpact failure or malfunction. Examination of the aft seat control stick box revealed sheared rivets. A copy of the report is an attachment in the NTSB public docket for this case.
Updated on Apr 25 2013 10:08AM

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Landing Facility/Approach Information

Airport Name	Airport ID:	Airport Elevation	Runway Used	Runway Length	Runway Width
Flagler County Airport	XFL	33 Ft. MSL	N/A		

Runway Surface Type:

Runway Surface Condition:

Approach/Arrival Flown: NONE

VFR Approach/Landing: None

Aircraft Information

Aircraft Manufacturer	Model/Series	Serial Number
AEROSTAR S A	YAK-52	833808

Airworthiness Certificate(s): Special Flight (Special)

Landing Gear Type: Retractable - Tailwheel

Amateur Built Acft?	Number of Seats:	Certified Max Gross Wt.	Number of Engines:
No	2	LBS	1

Engine Type:	Engine Manufacturer:	Model/Series:	Rated Power:
Reciprocating	Vedeneyev	M14P	360 HP

- Aircraft Inspection Information

Type of Last Inspection	Date of Last Inspection	Time Since Last Inspection	Airframe Total Time
Annual	10/2010	Hours	1188 Hours

- Emergency Locator Transmitter (ELT) Information

ELT Installed?/Type	ELT Operated?	ELT Aided in Locating Accident Site?

Owner/Operator Information

Registered Aircraft Owner	Street Address	City	State	Zip Code
WALKER WILLIAM E DBA		COOKEVILLE	TN	38501-3300

Operator of Aircraft	Street Address	City	State	Zip Code
WALKER WILLIAM E DBA		COOKEVILLE	TN	38501-3300

Operator Does Business As: Walker Brothers Aircraft

Operator Designator Code:

- Type of U.S. Certificate(s) Held: None

Air Carrier Operating Certificate(s):

Operating Certificate:

Operator Certificate:

Regulation Flight Conducted Under: Part 91: General Aviation

Type of Flight Operation Conducted: Air Race/Show

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First Pilot Information

Name	City	State	Date of Birth	Age
On File	On File	On File	On File	58

Sex: M | Seat Occupied: Front | Occupational Pilot? No | Certificate Number: On File

Certificate(s): Commercial; Private

Airplane Rating(s): Multi-engine Land; Single-engine Land

Rotorcraft/Glider/LTA: None

Instrument Rating(s): Airplane

Instructor Rating(s): None

Current Biennial Flight Review? 12/2010

Medical Cert.: Class 2 | Medical Cert. Status: Without Waivers/Limitations | Date of Last Medical Exam: 10/2010

- Flight Time Matrix	All A/C	This Make and Model	Airplane Single Engine	Airplane Mult-Engine	Night	Instrument Actual	Instrument Simulated	Rotorcraft	Glider	Lighter Than Air
Total Time	3500									
Pilot In Command(PIC)										
Instructor										
Instruction Received										
Last 90 Days										
Last 30 Days										
Last 24 Hours										

Seatbelt Used? Yes | Shoulder Harness Used? Yes | Toxicology Performed? Yes | Second Pilot? No

Flight Plan/Itinerary

Type of Flight Plan Filed: None

Departure Point	State	Airport Identifier	Departure Time	Time Zone
Same as Accident/Incident Location		XFL	1622	EDT

Destination	State	Airport Identifier
Local Flight	FL	XFL

Type of Clearance: None

Type of Airspace:

Weather Information

Source of Wx Information:

Unknown

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Weather Information

WOF ID	Observation Time	Time Zone	WOF Elevation	WOF Distance From Accident Site	Direction From Accident Site
XFL	1629	EDT	33 Ft. MSL	NM	Deg. Mag.

Sky/Lowest Cloud Condition: Clear Ft. AGL | Condition of Light: Day

Lowest Ceiling: None Ft. AGL | Visibility: 10 SM | Altimeter: 29.88 "Hg

Temperature: 28 °C | Dew Point: 10 °C | Weather Conditions at Accident Site: Visual Conditions

Wind Direction: 130 | Wind Speed: 9 | Wind Gusts:

Visibility (RVR): Ft. | Visibility (RVV) SM

Precip and/or Obscuration:
No Obscuration; No Precipitation

Accident Information

Aircraft Damage: Substantial | Aircraft Fire: Ground | Aircraft Explosion None

- Injury Summary Matrix	Fatal	Serious	Minor	None	TOTAL
First Pilot	1				1
Second Pilot					
Student Pilot					
Flight Instructor					
Check Pilot					
Flight Engineer					
Cabin Attendants					
Other Crew					
Passengers					
- TOTAL ABOARD -	1				1
Other Ground					
- GRAND TOTAL -	1				1

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Administrative Information

Investigator-In-Charge (IIC)

Timothy W. Monville

Additional Persons Participating in This Accident/Incident Investigation:

Laura Burns
FAA/FSDO
Orlando, FL

Rocky Davidson
FAA/FSDO
Nashville, TN